

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A method for providing image data:
receiving a rendering command;
rendering an image based upon the rendering command, wherein the image is to
be stored at a first memory location of a first frame buffer;
determining a second memory location representative of a raster location;
enabling, by a write behind controller in a video graphics adapter, storage of the
image at the first memory location when the second memory location indicates the raster
has accessed data at the first memory location; and
preventing, by the write behind controller, storage of the image at the first
memory location when the second memory location indicates the raster has not accessed
data at the first memory location.
2. (Original) The method of claim 1, wherein the step of receiving a
rendering command, includes receiving a rendering command from a system processor.
3. (Original) The method of claim 1, wherein the first memory location and
the second memory location are representative of a specific bytes of data.
4. (Original) The method of claim 1, wherein the first memory location and
the second memory location are representative of a unique groups of data.
5. (Original) The method of claim 4, wherein the unique groups of data
includes data to be displayed as at least a portion of a line of video/graphics.
6. (Original) The method of claim 1, wherein the second memory location
indicates a data accessed by a display device controller.
7. (Original) The method of claim 1, wherein the second memory location
indicates a data to be accessed by a display device controller.

8. (Previously presented) A method of providing image data:

defining a graphics primitive having a first portion at X and a second portion at Y,
wherein X and Y are indicative of address locations;

providing the graphics primitive to a rendering engine when the rendering engine
is storing data to a frame buffer being accessed by a display device controller providing a
current image, where the display device controller is yet to access an address location Z
having data associated with the current image and the location Z is between X and Y; and
preventing tearing of the current image.

9. (Original) The method of claim 8 wherein the address locations include
display line numbers.

10. (Original) The method of claim 9 wherein the address locations include
one of physical and logical address locations.

11. (Previously presented) A method of providing image data:

accessing a first portion of video/graphics data from a first portion of a frame
buffer for display on a display device;

storing a first portion of an image primitive to the first portion of the frame buffer
after the step of displaying the first portion of video/graphics data; and

prohibiting, by a write behind controller in a video graphics adapter, a second
portion of the image primitive from being stored to a second portion of the frame buffer
after the step of storing the first portion, wherein the second portion of the frame buffer is
adjacent to the first portion of the frame buffer.

12. (Original) The method of claim 11, further comprising the steps of:
accessing a second portion of video/graphics data from the second portion of the frame buffer for display on the display device after the step of prohibiting; and
storing the second portion of the image primitive to the second portion of the frame buffer after the step of accessing the second portion of video/graphics data.

13. (Original) A system for storing video/graphics data, the system comprising:

a rendering engine to render images; and
a write behind raster controller in a video graphics adapter coupled to the rendering engine to prohibit write access to memory locations that have not been displayed.

C 14. (Original) The system of claim 13 further comprising:
a display device controller coupled to the write behind raster to indicate a raster location.

15. (Original) The system of claim 13, wherein the rendering engine further includes:

a rendering engine location register, wherein the rendering engine location register is to store a first memory location to be accessed by the rendering engine; and
an over-run detect portion coupled to the rendering engine location register, and coupled to receive a raster location indicator, and to provide an over-run detect indicator, wherein the raster location indicator indicates a second memory location relative to a location currently accessed by the rendering engine, and the over-run detect indicator to prohibit the rendering engine from write accessing to memory locations.

16. (Original) The system of claim 13, wherein the write behind raster includes:

a multiplexor having a first input, a second input, and an output;
a latch having an input coupled to the output of the multiplexor, and an output;
a comparator having a first input coupled to the output of the latch, a second input, and an output; and
an incrementor having a first input coupled to the output of the latch, and an output coupled to the first input of the multiplexor.

17. (Original) A system for storing video/graphics data, the system comprising:

C \ a rendering engine for rendering a primitive image and writing data representing the primitive image into a frame buffer;
a display device controller for reading data from the frame buffer for display; and
a write prohibit means coupled to the display device controller to receive an indication of data read by the display device controller, and coupled to the rendering device to prevent a first portion of the primitive image from being written to the frame engine, while allowing a second portion of the primitive image to be written to the frame buffer.

18. (Original) The system of claim 17, wherein the first portion is prevented from being written by stalling the rendering device.

19. (Original) The system of claim 17, wherein the write prohibit means further allows the first portion of the primitive image to be written to the frame buffer based on an updated status of the indication of data read by the display device.

20. (Original) The system of claim 17, wherein the indication of data read indicates the access status of a line of video/graphics data.

21. (New) A method of providing image data:

accessing a first portion of video/graphics data from a first portion of a frame buffer for display on a display device;

storing a first portion of an image primitive to the first portion of the frame buffer in response to accessing the first portion of video/graphics data for display; and

prohibiting, by a write behind controller in a video graphics adapter, a second portion of the image primitive from being stored to a second portion of the frame buffer in response to storing the first portion of the image primitive and until the first portion of the image primitive is displayed, wherein the second portion of the frame buffer is adjacent to the first portion of the frame buffer.

22. (New) The method of claim 22, further comprising the steps of:

accessing a second portion of video/graphics data from the second portion of the frame buffer for display on the display device after the step of prohibiting; and

storing the second portion of the image primitive to the second portion of the frame buffer after the step of accessing the second portion of video/graphics data.

23. (New) A system for storing video/graphics data, the system comprising:

a rendering engine to render images to a plurality of memory locations; and

a write behind raster controller in a video graphics adapter coupled to the rendering engine to prohibit write access to the plurality of memory locations when at least one of the memory locations has not been displayed.

24. (New) The system of claim 23 further comprising:

C \ a display device controller coupled to the write behind raster to indicate a raster location.
